

# AC Current transducer AK-B420L

$I_{PN} = 2 \dots 200A$

A Split Core transducer for the electronic measurement AC sinusoidal waveforms current, with galvanic isolation between the primary (High power) and the secondary circuits (Electronic circuit). Jumper selectable ranges and 4-20mA current output.



## Electrical data

Primary Nominal Current $I_{PN}$ (A.t.RMS)	Analogue Output Signal <sup>1)</sup> $I_{OUT}$ (mA)	Type	RoHS Date Code
2,5	4-20	<b>AK 5 B420L</b>	JULY 2006
10,20,50	4-20	<b>AK 50 B420L</b>	MAY 2006
100,150,200	4-20	<b>AK 200 B420L</b>	planned
$V_c$	Supply voltage (Loop powered)	24	V DC
$R_L$	Load resistance	see power supply diagram	
$V_b$	Rated voltage (CAT III, PD2)	150	VAC
$V_d$	RMS Isolation voltage test, 50 Hz, 1mn	3	kV AC
$f$	Frequency bandwidth	20-100	Hz

## Features

- AC sinusoidal measurement
- Average responding
- Split core box
- Current output
- Loop powered transducers
- Panel mounting
- Jumper selectable ranges

## Advantages

- Large aperture
- High isolation between primary and secondary circuits
- Easy to mount

## Accuracy - Dynamic performance data

X	Accuracy @ $I_{PN}$ , $T_A=25^\circ C$	$\pm 1$	%
$t_r$	Response time @ 90% of $I_{PN}$	< 300	mS

## Applications

- Automation systems  
Analog current reading for remote monitoring (e.g. motor).
- Data loggers  
Self-powered transducer does not drain data logger batteries.
- Panel meters  
Simple connection displays power consumption.

## General data

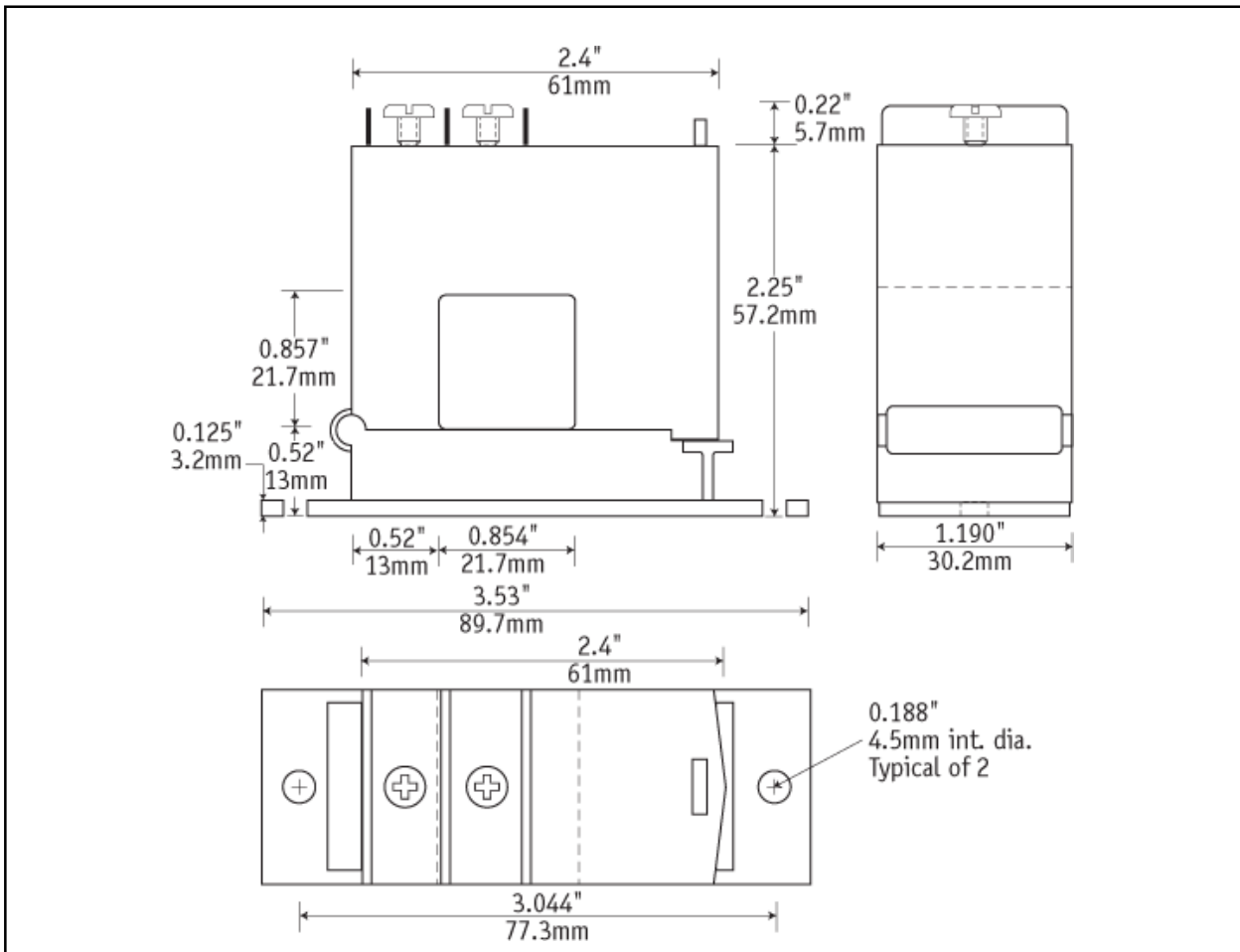
$T_A$	Ambient operating temperature (0-95% RH)	-20..+50	°C
$T_S$	Ambient storage temperature	-20..+85	°C
m	Mass	120	g
	Safety	IEC 61010-1	
	EMC	EN 61326	

## Options on request

- DIN mounting

Note : <sup>1)</sup> For 4-20mA output model, no saturation output up to 25mA.

**Dimensions AK-B420L** (unit : mm, 1mm = 0.0394 inch)

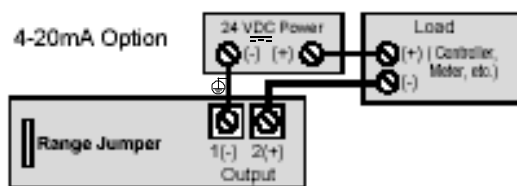


**Mechanical characteristics**

- General tolerance  $\pm 1$  mm
- Primary aperture 21.7 mm sq.
- Panel mounting 2 holes  $\varnothing$  4.5mm  
Distance between holes 77.3 mm

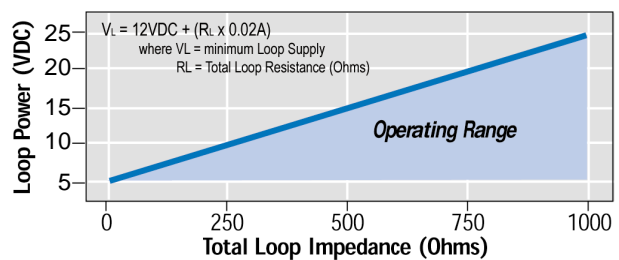
**Connections**

- 2 x UNC8 Cylindric Head



Notes: - Captive screw terminals.  
 - 12-22 AWG solid or stranded.  
 - Observe polarity.

**Power Supply diagram**



**Remark**

- Temperature of the primary conductor should not exceed 60°C.